	Type	Hits	Search Text
1	BRS	3791	429/12,30,33.ccls.
2	BRS	2621	electrophoretic adj deposition
3	BRS	96	S44 and "429"/$.ccls.
4	BRS	77	S45 and @ad<"20030716"
5	BRS	6658	porous with (stainless adj steel)
6	BRS	10	S46 and S47
7	BRS	0	S46 and ((polymeric polymer) adj2 electroyte)
8	BRS	12	S46 and ((polymeric polymer) adj2 electrolyte)
9	BRS	36230	electrodeposition
10	BRS	628	S51 and "429"/$.ccls.
11	BRS	451	S52 and @ad<"20030716"

	DBs
1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
8	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT

	Type	Hits	Search Text
12	BRS	99	S53 and ((polymeric polymer) adj2 electrolyte)
13	BRS	42	S54 and charged
14	BRS	868	charged adj2 electrolyte
15	BRS	38	S56 and S44
16	BRS	31	S57 and @ad<"20030716"
17	BRS	38944	electrodeposition electrodeposit
18	BRS	13	S59 and perfluorosulfonate
19	BRS	222	S59 and nafion
20	BRS	32	S61 and (porous adj3 substrate)
21	BRS	2621	electrophoretic adj deposition
22	BRS	2	"6706441".pn. and matrix

	DBs
12	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
13	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
14	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
15	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
16	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
17	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
18	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
19	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
20	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
22	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT

	Type	Hits	Search Text
23	BRS	2	"6706441".pn. and substrate
24	BRS	0	"6706441".pn. and substrate and fiber
25	BRS	0	"6706441".pn. and substrate and fib$
26	BRS	2	"6706441".pn. and substrate
27	BRS	28	Flexodruck
28	BRS	1	S61 and S62 and S63
29	BRS	6	S63 and nafion and (porous adj3 substrate)
30	BRS	32	S59 and nafion and (porous adj3 substrate)
31	BRS	21	S63 same (porous adj3 substrate)
32	BRS	9	S73 and "429"/$.ccls.
33	BRS	9	S74 and (electrolyte polymer polymeric nafion perfluorosulfonate)

	DBs
23	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
25	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
26	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
27	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
28	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
29	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
30	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
31	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
32	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
33	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT

	Type	Hits	Search Text
34	BRS	7	nasicon near2 nafion
35	BRS	37	nasicon with nafion
36	BRS	3	S77 and "429"/$.ccls.

	DBs
34	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
35	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT
36	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT

depositing the polymer.

ACCESSION NUMBER: 1964:21331 CAPLUS
DOCUMENT NUMBER: 60:21331
ORIGINAL REFERENCE NO.: 60:3735c-d
TITLE: Electrodeposition of polymers in porous electrodes
PATENT ASSIGNEE(S): Esso Research and Engineering Co.
SOURCE: 8 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 939823		19631016	GB 1961-11970	19610404
US 3113048		19631203	US 1960-23772	19600421
PRIORITY APPLN. INFO.:			US	19600421

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(FILE 'HOME' ENTERED AT 17:47:12 ON 17 JUL 2006)

FILE 'CAPLUS' ENTERED AT 17:47:25 ON 17 JUL 2006
L1 87378 S ELECTRODEPOSITION OR (ELECTROPHORETIC DEPOSITION)
L2 488 S L1 AND (FUEL CELL)
L3 99 S L2 AND (POLYMER OR POLYMERIC)
L4 4 S L3 AND STAINLESS STEEL

L3 ANSWER 96 OF 99 CAPLUS COPYRIGHT 2006 ACS on STN

AB cf. CA 59, 10991a. A C electrode is prepared by firing a C rod of the desired dimensions in a CO2-air atmospheric at 1600°F. for 0.5 hr. followed by cooling in a stream of CO2, wetproofing one face of the fired electrode by electrodeposition, and then platinizing the other face of the fired electrode by electrodeposition. In the wet-proofing step, a solution for electrodeposition is prepared by using 1 ml. poly(tetrafluoroethylene) (PTFE) in 25 ml. H2O. The solution is brought to pH 10 and placed in an electrodeposition bath. A strip of Pt is used as the counter electrode (cathode) while the C electrode is used as the anode. The solution in the bath is stirred and PTFE is deposited at 5-7 v. for 4-8 hrs. Most of the PTFE is deposited on the surface of the electrode facing away from the counter electrode. In platinizing, a chloroplatinic acid solution containing 100 mg. Pt/ml. is placed in an electrodeposition bath. A strip of Pt is used as the anode counter electrode. The C electrode containing the PTFE deposit is made the cathode and placed so that the surface having the PTFE deposit is facing the counter electrode. Pt is deposited at the cathode at 5-8 v. and for 4 hrs. The finished electrode has a uniform Pt coating.

ACCESSION NUMBER: 1967:43159 CAPLUS
DOCUMENT NUMBER: 66:43159
TITLE: Carbon electrodes coated with poly(tetrafluoroethylene) and platinum for use in fuel cells
INVENTOR(S): Zimmer, Jon W.
PATENT ASSIGNEE(S): United States Dept. of the Army
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3297482		19670110	US 1963-314072	19631004

L3 ANSWER 97 OF 99 CAPLUS COPYRIGHT 2006 ACS on STN

AB A process for making a fluid diffusion electrode for use in a fuel cell which comprises contacting porous plastic with an aqueous solution of SnCl2 or N2H4. The plastic is dried and is treated with an aqueous solution of PdCl2 such that nucleating sites of elemental Pd are deposited on the surface of the plastic. The plastic containing the elemental Pd is treated with an electroless plating bath containing a Cu salt. A film of elemental Cu is flash plated on the plastic. The flash plated plastic is placed in an electroplating bath containing a Ag compound An elec. current is passed through the electroplating bath so that a continuous layer of Ag is deposited on the surface and within the pores of the plastic. The resistivity of the Ag plated plastic is comparable to that of a solid conductor composed of the electroconductive metal which is electroplated.

ACCESSION NUMBER: 1966:409855 CAPLUS
DOCUMENT NUMBER: 65:9855
ORIGINAL REFERENCE NO.: 65:1780d-e
TITLE: Method of producing fuel cell electrodes
INVENTOR(S): LeDuc, Joseph A. M.
PATENT ASSIGNEE(S): Pullman Inc.
SOURCE: 7 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3235473		19660215	US 1961-162221	19611226

L3 ANSWER 98 OF 99 CAPLUS COPYRIGHT 2006 ACS on STN

AB A metal coated fuel cell electrode may be prepared by using an organic substrate containing ion exchange groups such as SO3H, COOH, and OH that will react to pick up metal ions from solution These ions may be from Ag, Au, Pt, and Pd salts which are then reduced to the metallic state by a proper reducing agent. The process may be repeated until the ohmic resistance of the metal film is acceptable. In certain cases a 2nd metal may be deposited over the first. For example, a membrane sheet 4 mils thick by 10 + 10 in. was made from a sulfonated polystyrene and a nonionic binder. This membrane was placed in a frame such that the underside was in contact with water. The exposed upper surface was brought into contact with 150 mL. 0.1N AgNO3 for a few sec. This solution was then drained off and the surface H2O washed. Next 150 mL. of 0.19 M hydroquinone aqueous solution containing 2 g. gum arabic/l. was placed on this surface to reduce the Ag salts. About 2 mL. of 25% AgNO3 was added to the reducing solution and the solution agitated for 5-8 min. A film of Ag forms on the surface. The procedure of plating was repeated until the resistance across the membrane surface was 0.014 Ω. This process is then repeated on the opposite side. Next, the electrode was placed in an electrodeposition baths and Pt black was electrodeposited on the Ag surfaces. The membrane was then saturated with aqueous H2SO4, the proper circuit added between the two surfaces, and H added on one side of the electrode with O on the other. The cell so formed with this electrode was operated at 75°F. with H and 150°F. with C2H4 as the fuel.

ACCESSION NUMBER: 1966:73595 CAPLUS
DOCUMENT NUMBER: 64:73595
ORIGINAL REFERENCE NO.: 64:13765a-c
TITLE: Metallic coating techniques for fuel cell electrode organic substrates
INVENTOR(S): Beltzer, Morton; Heath, Carl E., Jr.; Tarmy, Barry L.
PATENT ASSIGNEE(S): Esso Research and Engineering Co.
SOURCE: 8 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3234050		19660208	US 1962-163752	19610601
PRIORITY APPLN. INFO.:			US	19610601

L3 ANSWER 99 OF 99 CAPLUS COPYRIGHT 2006 ACS on STN

AB A porous fuel cell electrode, such as a porous C electrode impregnated with an anodic or cathodic catalyst, is treated to deposit in the larger pores a thin layer of a high mol. weight polymer from an aqueous dispersion of the polymer. For example, an aqueous suspension of Teflon is slurried with an ion exchange resin, the electrode is immersed in the slurry, and d.c. of 0.1-1 amps. and 3-30 v. applied for 2-60 sec. to cause the polymer particles to migrate by electrophoresis. The electrode is removed from the slurry, dried at 200°F., and heated to 600-750°F., whereupon the polymer begins to decompose so that a firm bonding of polymer to the C surface is obtained. The smaller pores of the electrode are too small to admit the polymer and are left uncoated. The electrode is treated to deposit the catalyst before